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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,337	03/18/2004	Xiaoyu Li	DP-310459	5568

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DELPHI TECHNOLOGIES, INC.
M/C 480-410-202
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TROY, MI 48007

EXAMINER

BOES, TERENCE

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 10/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/803,337

Applicant(s)

LI ET AL.

Examiner

Terence Boes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/18/2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(f) he did not himself invent the subject matter sought to be patented.

1. Claims 3-13, 18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Li et al. US 2005/0199087.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Li discloses:

Re clms 3, 4, 5, 10, 11, 12, 13, 18,

- Lower steering column jacket (12) for attachment to a vehicle

- Upper steering column jacket (14) engaged for telescoping movement with lower steering column jacket for supporting a steering wheel in a desired longitudinal position relative to said lower steering column jacket
- Tilt housing (16) engaged for tilting movement with said upper steering column jacket for supporting the steering wheel in a desired angular position relative to said upper steering column jacket
- Single locking device (24) for limiting telescoping and tilting movement
- Linking member (20) extending parallel to and spaced from said upper steering column jacket
- First end (right side of (20) shown connected to (22)) pivotally connected to tilt housing (see fig 4, (20) is connected to tilt housing via (22))
- Second end (see fig. 4, left side of 20 is shown connected to lower steering column jacket via (18)) slidably connected to lower steering column jacket.
- Wherein said linking member moves linearly in response to telescoping and tilting movement (see fig 4).
- Said single locking device includes a wedge member (see fig 1 below, (A)) rotatably associated with lower steering column jacket and moveable between a locked position and unlocked position (wedge member can be tightened and locked or loosened and unlocked, wedge member is rotatably associated with lower steering column jacket in that it is rotatable relative to lower steering column jacket)

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- Single locking device includes a wedge member (A) disposed between said upper steering column jacket and linking member

Re clm 6,

- Lower steering column jacket defines an aperture (46) with an enlarged portion (enlarged portion is considered to be opening inside lower steering column jacket) wherein said wedge member (A) extends through said enlarged portion.

Re clm 7

- Lower steering column jacket including a guide (18) having an aperture (see fig 4, right side of 18 shows an aperture which (20) passes through) for receiving second end.

Re clm 8,

- Single locking device includes first engaging element (see fig 1 below, (B)) fixedly associated with said upper steering column jacket and adjacent to said wedging element.

Re clm 9,

- Single locking device includes second engaging element (34) movably associated with lower steering column jacket and adjacent to linking member (see fig 4).

Re clm 11,

- First end adjustably connected to tilt housing (right side of (20) shown connected to (22), link member is movable and therefore adjustable).

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Re clm 12,

- Single locking device includes a wedge member (A) adjacent to second end of linking member

Re clm 13,

- Wherein said lower steering column jacket includes a guide (18) having a first aperture (see fig 4, right side of 18 shows an aperture which (20) passes through) and a second aperture (see fig 4, left side of 18 shows an aperture which (20) passes through)

Re clm 15,

- Said second aperture (see fig 4, left side of 18 shows an aperture which (20) passes through) including an enlarged portion (see fig 4, enlarged portion is defined by threaded portion of aperture) and single locking device including an engaging element (see fig 4, threaded bushing shown inside of (18) is considered to be an engaging element) in enlarged portion

Re clm 19,

- Said wedge member defines a pair of first surfaces (see figure below, (C) are top and bottom surfaces of wedge member) extending substantially parallel to one another and spaced from one another a first distance wherein said first distance is greater than a second distance defined between said linking member and said upper steering column jacket (see fig 4, length of wedge member appears greater than distance from linking member to upper steering column jacket)

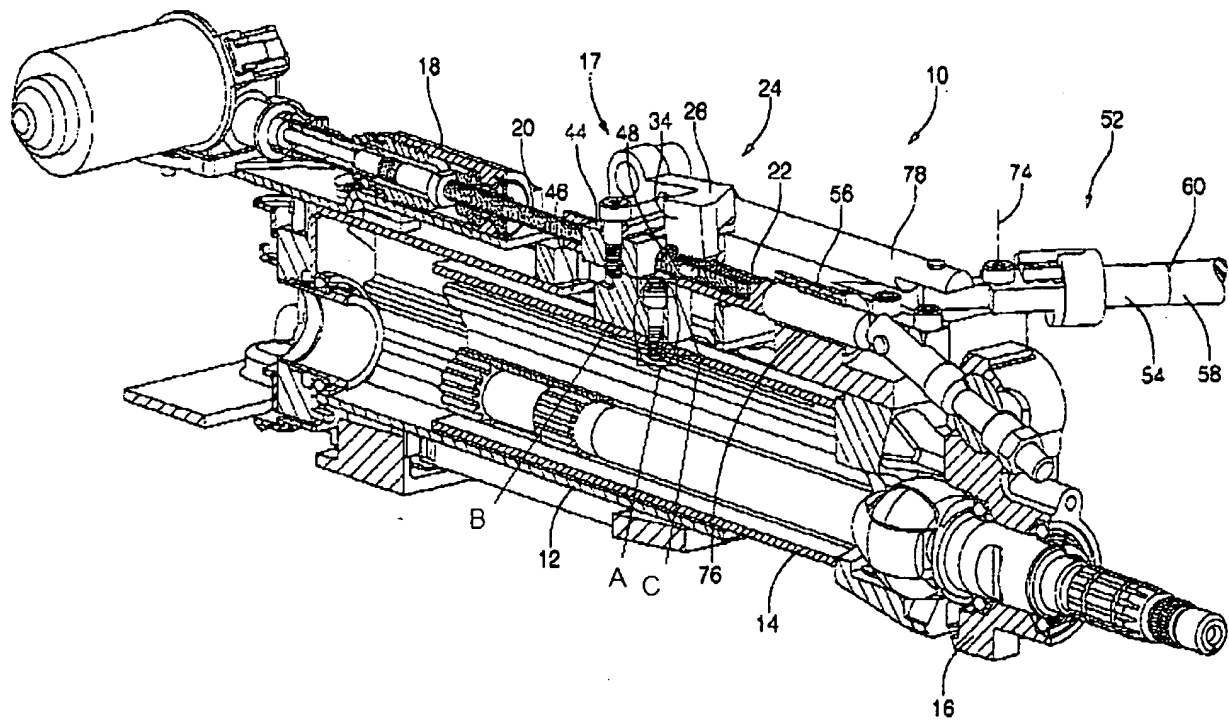


Figure 1 – Figure 4 of US 2005/0199087

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al US 2005/0199087 in view of Burke USP 4,179,137.

Li discloses all of the claimed subject matter as described above. Li does not disclose a lower steering column jacket defining a third aperture through which a wedge member extends.

Burke teaches a lower steering column jacket (12) defining a third aperture (71) through which a wedge member extends for the purpose of securely holding 2 tubes in a selected telescoped position (C3/L40-65).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Li and provide a lower steering column jacket defining a third aperture through which a wedge member extends, as taught by Burke, for the purpose of securely holding 2 tubes in a selected telescoped position.

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Li also discloses:

Re clm 16,

- Engaging element is adjustably positioned relative to linking member (engaging element is threaded and therefore adjustable relative to linking member)

Re clm 17,

- Second aperture communicating with said enlarged portion (second aperture is immediately adjacent said enlarged portion and therefore considered to be communicating)

3. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al US 2005/0199087 in view of Cymbal et al. USP 5,669,270.

Li discloses all of the claimed subject matter as described above. Li does not disclose a wedge member received in a notch defined by a linking member.

Cymbal teaches a wedge member (58) received in a notch (50) defined by a linking member (36) for the purpose of concealment and to eliminate running clearance (see abstract).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Li and provide a wedge member received in a notch defined by a linking member, as taught by Cymbal, for the purpose of concealment and to eliminate running clearance.

Response to Arguments

4. Applicant's arguments filed 08/17/2006 have been fully considered but they are not persuasive.

Applicant argues:

1. The alleged linking member (20) does not move linearly at all.
 - a. In response, this is a functional limitation that does not further limit the claim. The examiner notes that while features of an apparatus may be recited either structurally or functionally, claims directed to >an< apparatus must be distinguished from the prior art in terms of structure rather than function. Therefore, the claims are rejected since all claim limitations have been met as disclosed above (see MPEP 2114).
2. The office action is generally silent with respect to the rejection of claim 5.
 - a. In response the examiner respectfully directs the applicant to the portion of the rejection which clearly recites "...Wedge member (see fig 1 below, (A)) rotatably associated with lower steering column jacket and moveable between a locked position and unlocked position (wedge member can be tightened and locked or loosened and unlocked, wedge member is rotatably associated with lower steering column jacket in that it is rotatable relative to lower steering column jacket)"

3. The alleged wedge member (A) of Li '087 is actually a fastener or bolt...and has nothing to do with the locking operation of the invention at issue.
 - a. In response, the examiner agrees that the wedge member (as broadly recited) is a fastener or bolt, however the bolt or fastener is considered by the examiner to be a wedge member as the individual threads are wedges, fasteners of this type are generally considered to be wedges, and bolts are used to fasten objects by a wedging operation.
 - b. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., wedge member [having nothing to do with the locking operation of the invention at issue]) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
4. The alleged wedge member of Li does not urge the alleged linking member (20) away from the upper steering column jacket (14).
 - a. In response, this is a functional limitation that does not further limit the claim. The examiner notes that while features of an apparatus may be recited either structurally or functionally, claims directed to

>an< apparatus must be distinguished from the prior art in terms of structure rather than function. Therefore, the claims are rejected since all claim limitations have been met as disclosed above (see MPEP 2114).

5. The alleged distal end of the motor shaft (20) is not connected to anything.
 - a. In response, the examiner notes that the distal end of motor shaft is considered to include a small portion of the threads which are clearly shown in contact with 22 which in turn is connected (as broadly recited) to tilt housing via 76.
6. The alleged lower steering column jacket (12) of Burke '137 is not a jacket surrounding a steering column at all, but is a part of the vehicle structure for supporting the column, and that the alleged lower steering column jacket of Burke '137 would actually be the upper steering column jacket if it were a jacket.
 - a. In response, the examiner respectfully directs the applicant to (C2/L12-14) which recites "...a steering column assembly 10 having an elongated outer support tube 12..." the elongated outer support tube is considered to be a steering column jacket as it is a jacket which supports a steering column.
 - b. In response, the examiner notes that 12 is the lower of 2 telescoping columns in that 12 is both the stationary member, as is applicant's lower steering column jacket (12), and in that 12 is the

member which would be furthest from a driver of a vehicle, as in applicant's disclosure.

7. The alleged notch in Cymbal '270 is carried by shaft (34) of the actual steering column and not a separate linking member of a locking device.

a. In response, the examiner notes that the claims do not recite "a separate linking member". In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a "separate linking member") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

8. The notch carried by the linking member (22), of claim 20 is required not to enhance movement but prevent movement of member (22), and not rotational movement but linear movement.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., required not to enhance movement but prevent movement of member (22)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, this

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argument seems to be drawn to an intended use and a functional limitation which would not be given patentable weight (see MPEP 2113, 2114).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terence Boes whose telephone number is (571) 272-4898. The examiner can normally be reached on Monday - Friday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TB
10/16/06



RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER